

Draft Policy Option #TLU-4: Promote Idle Reduction Technologies

Option 4.2.6 from the Policy Matrix.

1. Policy Description:

- a. Lay description of proposed policy action: The purpose of this measure is to reduce idling from diesel vehicles through the voluntary adoption of idle reduction technologies. Available technologies for reducing the need for idling includes: automatic engine shut down/start up system controls; direct fired heaters (for providing heat only); auxiliary power units; and truck stop electrification.
- b. Policy Design Parameters:
 - i. Implementation level(s) beyond BAU: This measure should coincide with the strengthening of the Maricopa County idling restriction.
 - ii. Timing of implementation
 - iii. Implementing parties: Industry, ADEQ, Counties, others?
 - iv. Other
- c. Implementation Mechanism(s): Indicate which mechanisms are to be used, and describe the specific approach that is proposed
 - i. Information and education: Provide information to fleet carriers, shippers, retailers, and others involved in the trucking industry indicating the economic benefits, as well as the environmental benefits, of applying idle reduction technologies. Also, identifying best practices within the industry and recognizing companies with these best practices in place within Arizona should be used to encourage companies to select these carriers for their shipments.
 - ii. Technical assistance
 - iii. Funding mechanisms and or incentives: CMAQ funds and federal money may be available for idle reduction programs. Plan needs to be developed to apply for the funds. A portion of the revenue from facility usage could be directed to the enforcing agency as a means of their funding. (If this is an option, it would be required to include the Sheriff's department as a stakeholder.)
 - iv. Voluntary and or negotiated agreements: Encourage participation in EPA's SmartWay Transport Partnership (or similar programs).
 - v. Codes and standards: Improving the effectiveness and enforcement of the Maricopa County Vehicle Idling Restriction Ordinance (See policy #4.2.7) could lead to more widespread use of idle reduction technologies.

Propose legislation to partially fund an idling reduction program in the State, focusing on high idling areas.

- vi. Market based mechanisms
- vii. Pilots and demos: Coordinate with product developers to help them promote themselves. Investigate availability of funds for pilot or demo projects on idle reduction technologies from EPA, DOE, and DOT. If funding available, develop a pilot program to evaluate the effectiveness of various idle reduction technologies, including implementation of electrification, if this is shown to be successful in other states. Evaluate the effectiveness of the pilot program before implementing on a broader scale.
- viii. Research and development
- ix. Reporting
- x. Registry
- xi. Other?

2. BAU Policies/Programs, if applicable:

- a. Idle reduction programs are currently being used by some shippers/carriers/retailers in Arizona.
- b. Description of policy/program #2
- c. Etc.

3. Types(s) of GHG Benefit(s): Reducing idling will reduce black carbon emissions, as well as all other GHG exhaust emissions (CO₂, CH₄, N₂O) through reduced fuel consumption. However, it is important to also ensure that any technologies used have lower emissions than the diesel truck idling emissions.

4. Types of Ancillary Benefits and or Costs, if applicable:

- a. Reductions in idling will also reduce emissions of NO_x and PM.
- b. Idle emission reductions will reduce fuel consumption, thus leading to a cost benefit from reduced operating costs.
- c. Providing idling reduction technologies (electrification/portable power units) at mandatory truck stops, such as Port-of-Entries/weigh stations, could prevent idling in other locations. Providing central warehousing infrastructure may avoid idling required for refrigeration or other critical needs. However, providing any new infrastructure requires funding.

5. Estimated GHG Savings and Costs Per MMTCO₂e:
 - a. Summary Table of:
 - i. GHG potential in 2010, 2020
 - ii. Net Cost per MMTCO₂e in 2010, 2020
 - b. Insert Excel Worksheet showing summary GHG reduction potential and net cost
6. Data Sources, Methods and Assumptions:
 - a. Data Sources
 - b. Quantification Methods
 - c. Key Assumptions
7. Key Uncertainties if applicable:
 - a. Benefits
 - b. Costs
8. Description of Ancillary Benefits and Costs, if applicable:
 - a. Description of issue #1
 - b. Description issue #2
 - c. Etc.
9. Description of Feasibility Issues, if applicable:
 - a. Description of issue #1
 - b. Description of issue #2
 - c. Etc.
10. Status of Group Approval:
 - a. Pending
 - b. Completed
11. Level of Group Support:

- a. Unanimous Consent
- b. Supermajority
- c. Majority
- d. Minority

12. Barriers to consensus, if applicable (less than unanimous consent):

- a. Description of barrier #1
- b. Description of barrier #2
- c. Etc.